By H. G. ALLCARD, F.R.E.S. and ANTHONY VALLETTA, F.R.E.S. 2

We met at the new airport, Reina Sofia, in Tenerife on Tuesday. the 1st of September at 1.15 p.m.; though on different flights from different airports, we managed to arrive more or less at the same time at our destination. By 2.30 p.m. we had reached our hotel at Santa Cruz de Tenerife.

Whilst enjoying a cup of tea on the patio, we were greeted by the smallest butterfly. Zizeeria knysna Trimen, which was flying in good numbers on the well-trimmed hedges surrounding the lawn. Not much later the largest butterfly Danaus plexippus Linnaeus. appeared and was soon followed by another. They both soared and fell and soared again until, tired, they rested on the bougainvillea for a quick drink. As in previous years, we were looking forward to seeing Catopsilia florella Fabricius in the hotel gardens, but this time it was absent, though the foodplant, Cassia didymobatyra, was still available. Later we noticed that it was also absent from the nearby park where several huge Cassia trees were in full bloom and where, in 1979, we had seen so many pupa cases on their defoliated branches and butterflies on the wing. The only other butterfly we saw that afternoon was Pieris napae Linnaeus.

2nd September. We paid a courtesy visit to the Director of Icona (National Institute for the Conservation of Nature). He told us that there had been little rain-fall that winter and consequently the vegetation had dried up earlier than usual. We then went to Monte de las Mercedes. 19km from Santa Cruz: there we noticed the complete dryness. The Cedronella canariensis, the favourite plant of the butterflies, was in seed and the Rubus ulmifolius was in berries. The only butterflies we saw in that locality were Cyclirius webbianus Brulle and Lampides boeticus Linnaeus. So we drove further on to the road which leads to Las Carboneras; here also we were disappointed. All the Cedronella that grew near the road had been uprooted to make room for a concrete gutter. Two years previously this road, though dusty and somewhat rough, had been a paradise for Gonepteryx cleobule Hubner when the Cedronella was available and in bloom. The larval foodplant, Rhamnus glandulosa, was still there but the food for the butterfly had totally disappeared. In fact we did not come across a single butterfly until we reached a country house some 2km away where G. cleobule, Colias crocea Geoffroy, Pararge xiphioides Staudinger, P. rapae and C. webbianus were feeding at garden flowers.

3rd September. We again visited Monte de las Mercedes but as nothing was on the wing we proceeded to Las Yedras. Here, once more, we found that the Cedronella had been cut down, especially those plants by the road. Luckily we noticed a spot below a villa

¹Gainsborough, Park Drive, Hale, Cheshire, MA15 9DH.

²257 Msida Street, B'Kara, Malta.

where a few plants had been spared. We saw a small butterfly resting on a dry thistle and to our delight it was *Thymelicus acteon christi* Rebel, the only skipper found on the island. Two *C. crocea*, very small in size, a single *Pontia daplidice* Linnaeus and a male and female *Maniola jurtina* f. *fortunata* Alpheraky were also seen. All male *G. cleobule* seen that morning had their wings damaged

but the females were in very good condition.

4th September. In the morning we explored another locality on the other side of Las Carboneras, below Monte de las Mercedes and some 600m above sea level. We could not go far as a landslide had blocked the road the night before. This locality was a good one for Lycaenidae and Hymenoptera; in fact, C. webbianus, Lycaena phlaeus Linnaeus Aricia cramera Eschscholtz and L. boeticus were quite common on the Mentha pulegium, Satureja nepeta and Echium plantagineum. Looking down a ravine, we noticed that the Cedronella was still in bloom and that several G. cleobule, mostly females, were patronising the flowers. In this locality found several caterpillars of different sizes on Teline microphylla; they had short hair and were greyish black with a greenish dorsal and a vellow lateral stripe. We took a few that were fully grown and after a few days they formed silken cocoons covered with their own excreta. The moths started emerging on the 7th of October and turned out to be *Uresiphita limbalis* Denis & Schiffermuller.

5th September. As in former years, we did not want to miss a visit to Puerto de la Cruz, if not for the butterflies at least for the ever-changing panoramic view from the coach all along the 38km journey. After a two-hour drive through hamlets, small towns and many banana groves, we reached our destination. We passed through Taoro Park, or rather what was once a park as now it is a parking site and sports centre. Still, D. plexippus and C. florella were flying in the gardens. We again saw Z. knysna flying over a vetch and on another half-dry leguminous plant two L. phlaeus tried to sip what they could from the remaining flowers. We went to an hotel for a cup of coffee and in the garden we saw Pieris cheiranthi Hubner resting on the only nasturtium (Tropaeolum majus), a plant which in previous years had covered the whole area; then pupae of this butterfly had abounded on the nearby walls and the empty cases were still to be seen. We waited briefly until the butterfly left the plant and to our delight found a cluster of newly laid eggs on the underside of a leaf. C. florella and D. plexippus were in good numbers by the swimming pool. We had a look at the Cassia trees and found two larvae of the former. One, which was quite big, pupated on the 10th and the butterfly emerged on the 19th, a female of the whitish form. The other was much smaller and, after being fed on Cassia taken with us to England, pupated on the 21st; the butterfly emerged on the 4th of October, having taken longer in the pupal stage owing to the difference in climate.

6th September. Senor M. Morales Martin and his son drove us in their car to parts of the island we had not visited so far and where small colonies of *G. cleobule* were still thriving. We visited Las Vueltas de Taganana and went down to Culuzo del

Tejo at the very northern tip of the island. We returned to Santa Cruz taking the road from El Bailadero to San Andres, an area mostly barren except for several species of *Euphorbia*, hoping to come across *Danaus chrysippus* Linnaeus which we had not encountered during our visits in 1977 and 1979. We were very grateful to our friends for, besides providing the enjoyable drive, they pointed out to us places like isolated hamlets and the Dutch village, accessible only from the sea, which we would never have located on our own.

GOMERA

In 1979 we visited the island only for a couple of hours as no accommodation was obtainable. This time, a week later, rooms were available and we were happy to spend two fruitful days on this wonderful island.

7th September. The ferry reached San Sebastian, the port and capital of Gomera, at 11.25 a.m. Luckily we found the same taxi driver whom we had hired two years before and who knew what we were after. We checked in at the hotel and then drove straight to El Cedro where the forest which registers most of the rainfall provides the right habitat for the flora and fauna. We wanted to visit an area further north of La Laguna Grande, where on our last visit we had found a mass of butterflies, especially G. cleobule, feeding on a carpet of Cedronella. To our surprise, all the flowering plants had been uprooted and heather trees planted instead. Thus the ecology of the area had completely changed and, with no flowers at hand, the butterflies and other insects had had to move elsewhere. This being so, we drove down to El Cedro. Here, unlike those in Tenerife, the Cedronella was still in bloom in shady localities. It was not long before G. cleopatra cleobule started flying out of the forest in search of the flowers; females were predominant that morning and most of the males had passed their best. Pandoriana pandora Denis & Schiffermüller was frequently seen crossing the road at a considerable height and the few that settled were seen to be badly worn. As in Tenerife, C. webbianus and L. boeticus were very common and very small. A few battered female M. jurtina f. fortunata were still on the wing and we saw two C. crocea, one P. daplidice and several P. xiphioides. The only moths we came across were Macroglossum stellatarum Linnaeus hovering over the flowers; they seemed quite fresh.

8th September. After a restful night we were ready for another visit to El Cedro. The sky was overcast and the weather discouraging. Two years previously we also experienced this type of weather and it had gradually cleared up; so we decided to go ahead. Fortunately the same thing happened and by 11.30 a.m. the clouds had drifted away and the sun was shining brightly. This time more male than female G. cleopatra cleobule were seen and most of them were quite fresh. This variation in the condition of specimens could arise from there being two broods, but a more likely explanation is that the adult life-span of Gonepteryx species is rather long and, since the

females vary in their time of leaving hibernation and egg-laying, the emergence of the butterflies is prolonged. Derry & Derry (1979), who visited Tenerife and Gomera in July, two months ahead of us, also encountered worn and fresh imagines. All the other species seen on the first day were on the wing again with the addition of A. cramera and P. xiphioides. We saw very few other insects as the season was almost over. Bombus terrestris canariensis Perez, Cerceris concinna Brulle and Podalonia tydei Le Guillou were still on the wing, the same species as we had seen in 1979, but in smaller number.

In the evening we caught the ferry back to Tenerife and returned to our hotel at Santa Cruz.

9th September. We spent a restful day at the hotel evaluating

what we had seen and enjoyed most in Gomera.

10th September. We chose a different locality on the mountains, Pico del Inglis, but as it was windy we moved to a lower and more sheltered place where some wild plants were still in bloom. We waited and waited for butterflies to appear. The only sign of life, besides the isolated chirping of some birds, was an unusual number of large dragonflies (Anax sp.) parading up and down the smooth road. They came very close to us but not within our reach. Naturally they were after food, but, not being close to water, it was not easy to find any. At last, as a male G. cleobule flew down from the forest, its golden wings shining in the sun, down dived one of these predators, snatched it with its legs and mouth and tried to fly away to the nearest tree. It was not so easy as in its efforts to escape the butterfly kept flapping its wings and pulling down the unkind snatcher. Both whirling in the air, they soon disappeared among the trees. We moved further on but there were still no butterflies so we concentrated on smaller fry. Beating the vegetation, we disturbed several micros, Agriphila trabeatellus canariensis Rebel and Endotricha rogenhoferi Rebel, both endemic, Pyrausta amata Scopoli, Psara bipunctalis Fabricius, Pselnophorus albiodactylus Milliere and Crombrugghia laetus Zeller. B. terrestris canariensis, P. tydei and Anthidium manicatum Linnaeus were quite common.

LA PALMA

Is Ith September. La Palma is the most westerly of the Canary Islands. Its area is 730 sq.km. and it is extremely rugged with the highest peak at 2483m. Laurel forests dominate the more northern slopes. Our flight took 20 minutes. On arrival at Santa Cruz de la Palma, we went straight to San Miguel Hotel which offers a fine view of the city, its harbour and bay, as well as the imposing mountains which encircle it. Taking a taxi, we drove north-eastwards to the forestal area of the island where we hoped to see Gonepteryx palmae Stamm and P. cheiranthi. The journey uphill took just one hour round many awkward and dangerous bends, but as we were in the hands of an expert driver it was enjoyable. This island was the greenest of the three we had so far visited. All sorts of trees and bushes, evergreen and deciduous,

decorated the road; Lantana, Nicotiana, Ricinus etc. were everywhere; higher up, peach and chestnut trees loaded with still unripe fruit were plentiful, while there were banana plantations at a lower level on the slopes of the ravines. Every cottage on the route provided a colourful garden with the flowers of the season, Hibiscus. Plumeria and morning glory adding further attraction. However, we were too late in the season to see many wild flowers, although a few were still in bloom in the forested area. It was some time before the butterflies started to appear; they were high up in the almost vertical slopes of the wooded mountains and unless the sun shone they would not fly out. It was an exciting moment when the first P. cheiranthi came down from such a height, floating freely with spread wings showing the large black spots on its forewings. G. palmae followed, floating down rather more quickly. P. xiphioides was still on the wing with females predominating. C. webbianus flew from flower to flower and they seemed larger than those from the other islands. We saw one C. crocea. a couple of P. pandora and a single Vanessa indica vulcania Godart. Two battered M. jurtina f. fortunata patrolled a stretch of ground all the time. As in the other islands, P. rapae was the most common butterfly. Other insects seen that day were B. terrestris canariensis. Paravespula germanica F. and the ubiquitous Apis mellifera L.

12th September. We visited the same place again as we assumed it was the best location for the time of year when most of the wild flowers were over; moreover, other areas were inaccessible owing to a lack of roads and tracks. It was not until 1.00 p.m. that we had a sunny period; during that short spell several *P. brassicae cheiranthi*, mostly worn males, flew down to the flowers together with a single *G. palmae*. By 3.45 p.m. it was getting cold so we went straight to

the airport for the flight back to Tenerife.

We were puzzled by the presence of *P. cherianthi* as no nasturtium, the principal foodplant of the caterpillar, was growing in the thick forest or nearby. This suggests an alternative foodplant. We also noticed that the La Palma butterflies lacked the subcostal black spots on the underside of the forewing characteristic of those in Tenerife. This suggests some biological difference between the stock of the two islands.

13th September. A dull, rainy day kept us indoors after the two

energetic days at La Palma.

14th September. Again a dull day. In the afternoon we drove to the fountain, Fuente Joco, at a height of 1900m where on our two previous visits we had seen *Pseudotergumia wyssii* Christ in good numbers. As this butterfly is active in dull weather and both early morning and late afternoon, we hoped to get a glimpse of it before our departure. Much to our dismay, not only was the butterfly absent but the fountain too was not in its former state; there had been no water running all the summer and it had been tampered with by an irresponsible person. The bees and wasps which had buzzed round our mouths two years before when we tried to drink had all gone: desolation reigned. So we drove down to Cumbo de Arafo at 1600m. Though already late in the afternoon, *A. cramera*,

L. phlaeas and C. webbianus were still flying. Turning over some stones, we found the largest earwig in the island, Annisolatus maxima Brulle, several beetles, mostly Heteger transversus Brulle, and the staphilinid Creophilus maxillosus spp. canariensis Bernhauer. We also disturbed the common grasshoppers Aiolopus strepens Latreille, A. thalassinus Fabricius, Calliptanus plebeius Walker, Ariagona margaritae Kr. and a Plalycleis species.

15th September. We returned to England, both satisfied with our enjoyable and fruitful holiday on the three picturesque islands

we had visited.

We would like to record our grateful thanks to Dr. A. Machado and Senor M. Morales Martin for their warm hospitality and great help. For a full bibliography see Allcard & Valletta, 1978 and 1981.

References

Allcard, H. G. & Valletta, A., 1978. A week of collecting in Tenerife, Canary Islands, in September 1977. Entomologist's Rec. J. Var. 90: 91-94, 1981. The Canary Islands revisited in 1979. Ibid. 93: 120-125.
Derry, N. J. & Derry, A. C., 1979. Tenerife and Gomera, July 1978. Ibid. 91: 275-278.

MOMPHA LACTEELLA STEPHENS: A POSSIBLE DISTINGUISHING CHARACTER. — I recently dissected a Mompha which I had suspected might be lacteella and this proved to be the case. I took it on 5th. June 1976 in the late afternoon at Lutton, Devon. It was in good condition, sitting on a leaf of Corylus at the edge of a confield. There was no evidence anywhere in the area of Epilobium hirsutum, the foodplant given by Emmet (1979, A field guide to the smaller British Lepidoptera).

Lacteella is very similar to propinquella. In his key to the genus Mompha, Meyrick (1928, A revised handbook of the British Lepidoptera) separates the two on the colour of the thorax and basal blotch. He describes this as being ochreous-white in propinquella and pale ferruginous-ochreous in lacteella, a distinction

which I find hard to interpret.

I have bred several propinquella and fresh specimens appear to have the thorax and basal blotch the same colour as lacteella. However his description of lacteella states "thorax pale ferruginous-ochreous, anteriorly sprinkled dark fuscous." Mr. S. N. A. Jacobs' coloured figure (1945, Wakely, Notes on the genus Mompha. Proc. Trans. S. Lon. ent. nat. Hist. Soc. 1944-45: 81-84, plt. V) shows this on the tegulae in his illustration of lacteella. In my specimen the tegulae are very stongly marked anteriorly with the blue-black ground colour of the forewings. None of my propinquella has such markings.

As I have only one specimen of *lacteella* I do not know whether this is a good character for separating the two species. I would welcome others' observations. — R. J. HECKFORD. 67, Newnham

Road, Plympton, Plymouth.